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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/718,764	11/21/2003	Kenneth B. Wagener	5853-340	1454

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EXAMINER

PENG, KUO LIANG

ART UNIT	PAPER NUMBER
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1712

DATE MAILED: 06/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/718,764

Applicant(s)

WAGENER ET AL.

Examiner

Kuo-Liang Peng

Art Unit

1712

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 2/17/05 response.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) 7-8, 13-31 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6, 9-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 7/8/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. Applicant's election without traverse of the invention of Group I (Claims 1-6 and 9-12) in the response to restriction requirement filed on February 17, 2005 is acknowledged. Claims 7-8 and 13-31 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made without traverse, *supra*.

Claim Objections

2. Claims 1-6 and 9-12 are objected to because of the following informalities:
In Claim 1 (line 1), Applicants are advised to remove "molecule comprising a".

In Claims 2-6 and 9-12 (line 1), Applicants are advised to replace "molecule" with -- polymer --.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Art Unit: 1712

4. Claims 4-6 and 9-12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 4 recites the limitations "R", "R₁" and "z" in lines 2-3. There are insufficient antecedent base for these limitations in the claim.

Claim 5 recites the limitations "R" and "y" in line 2. There are insufficient antecedent base for these limitations in the claim.

In Claim 6 (line 2), it is not clear as to what "compound 3" refers to.

In Claims 9-10 (line 3) and Claim 10 (line 1), "chain-end crosslinking molecule" causes confusion because it appears that C is not a "free" molecule.

In Claim 10 (line 2), it is not clear as to what "compounds 5 and 6" refers to.

In Claim 11 (line 2), it is not clear as to what "compound 7" refers to.

In Claim 12 (line 2), it is not clear as to what "compound 10" refers to.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

Art Unit: 1712

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-2 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Yajima600 (US 4 220 600).

Yajima600 discloses a poly(carbosilane-co-carbosiloxane) having a latent hydrogen group. Note that the Si-H and/or Si(H)₂ groups at the chain ends are crosslinkable groups. (col. 10, line 52 to col. 11, line 16)

7. Claims 1 and 2 are rejected under 35 U.S.C. 102(b) as being anticipated by Yajima576 (US 4 358 576).

Yajima576 discloses a poly(carbosilane-co-carbosiloxane) having a latent hydrogen group. (col. 5, lines 29-36 and col. 6, lines 25-27)

8. Claims 1-3 are rejected under 35 U.S.C. 102(b) as being anticipated by Dvornic (US 6 384 172).

Dvornic discloses a poly(carbosilane-co-carbosiloxane) having a latent reactive group of chlorine, ethoxy, methoxy, etc. (col. 2, lines 35-45, col. 4, line 60, col. 5, line 49 to col. 6, line 5)

Art Unit: 1712

9. Claims 1-3 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Yoshitake (US 6 184 407).

Yoshitake discloses a poly(carbosilane-co-carbosiloxane) having a latent methoxy group. Note that the Si-H, Si-OC₂H₅ or Si-glycidoxypyrpyl groups at chain ends are crosslinkable groups. (col. 5-col. 6 and col. 12, lines 35-40)

10. Claims 1-6 and 9-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Brezezinska (Journal of Polymer Science, Part A: Polymer Chemistry, vol. 38 (2000), 1544-1550).

Brezezinska discloses a poly(carbosilane-co-carbosiloxane) by copolymerizing the corresponding carbosilane and carbosiloxane precursors, which has a latent methoxy group. Note that compound 5 should possess alkenyl groups at the chain ends because of the acyclic diene metathesis method used for preparing the copolymer, which are crosslinkable groups. Furthermore, the methoxy groups can be at the chain ends, which can be considered as crosslinkable groups too. (Figure 2) Furthermore, a copolymer having chlorine latent reactive group can also be prepared by using similar technique. (page 1549, right column, last paragraph)


Art Unit: 1712

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kuo-Liang Peng whose telephone number is (571) 272-1091. The examiner can normally be reached on Monday-Friday from 8:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski, can be reached on (571) 272-1302. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

klp
May 27, 2005


Kuo-Liang Peng
Primary Examiner
Art Unit 1712